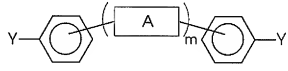
AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

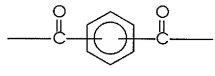
LISTING OF CLAIMS:

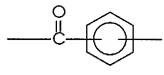
1-40. (Cancelled)

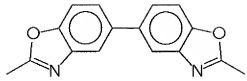
41. (Currently Amended) A process for preparing a branched polyarylene ether polymer which comprises (A) providing a reaction mixture comprising (i) an optional solvent, (ii) a polyfunctional phenol compound of the formula $Ar(OH)_x$ wherein $x \geq 3$ and wherein Ar is an aryl moiety or an alkylaryl moiety, provided that when Ar is an alkylaryl moiety at least three of the -OH groups are bonded to an aryl portion thereof, (iii) a compound of the formula

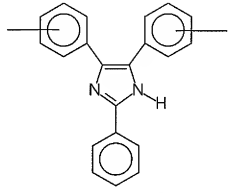


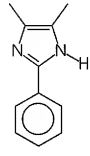
wherein m is an integer of 0 or 1, Y and Y' each, independently of the other, is a fluorine atom or a chlorine atom, and A is

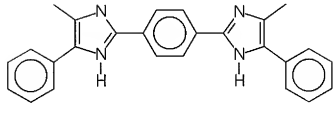




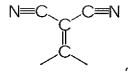


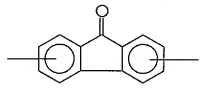


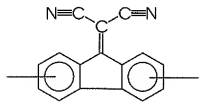


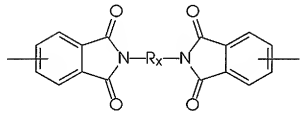


wherein R is a hydrogen atom, an alkyl group, an aryl group, an arylalkyl group, an alkylaryl group, or mixtures thereof,

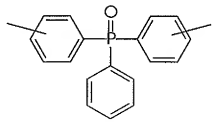


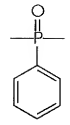




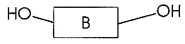


wherein R_x is an alkylene group, an arylene group, an arylalkylene group, an alkylarylene group, or mixtures thereof,

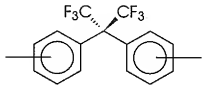


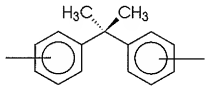


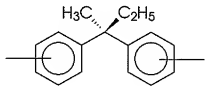
or mixtures thereof, (iv) a compound of the formula

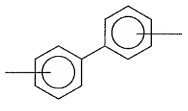


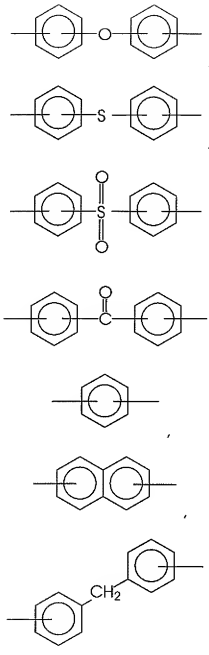
wherein B is

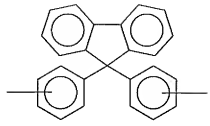


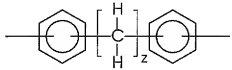




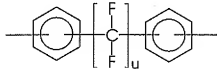




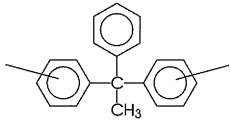


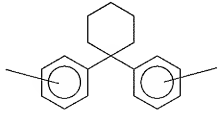


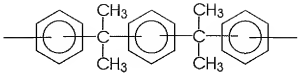
wherein z is an integer of from 2 to about 20,

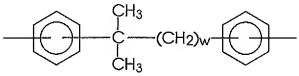


wherein u is an integer of from 1 to about 20,

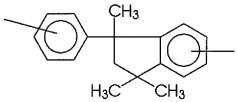


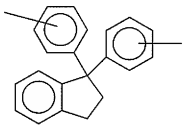


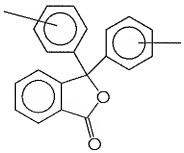


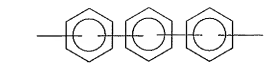


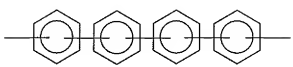
wherein w is an integer of from 1 to about 20,

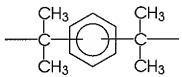


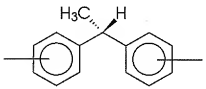


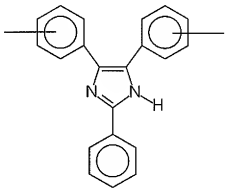


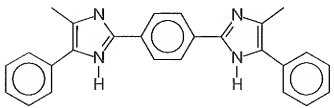


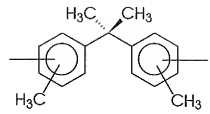


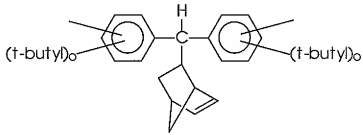

CH3
CH3
C
C
CH3
CH3


H3C
H

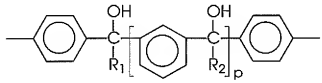

N
N
H


N
N
H
N
N
H



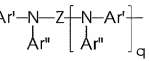


wherein each o, independently of the other, is an integer of 1, 2, 3, or 4,

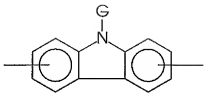


wherein R_1 and R_2 each, independently of the other, are alkyl groups, aryl groups, arylalkyl groups, alkylaryl groups, or mixtures thereof, and p is an integer of 0 or 1,

wherein b is an integer of 0 or 1,



wherein (1) Z is



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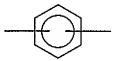

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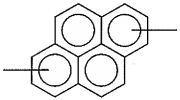

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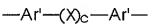
or



wherein c is 0 or 1; (2) Ar' is

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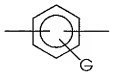

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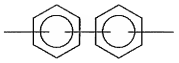
or



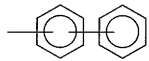
;

(3) G is an alkyl group selected from alkyl groups containing from about 2 to about 10 carbon atoms; (4) Ar" is

,

,

or



;

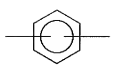
(5) X is

,

,

,

,



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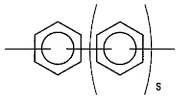


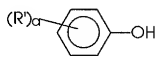
wherein s is 0, 1, or 2,

,

or

;

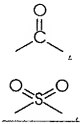
and (6) q is 0 or 1; or mixtures thereof, (v) ~~optionally,~~ a compound of the formula



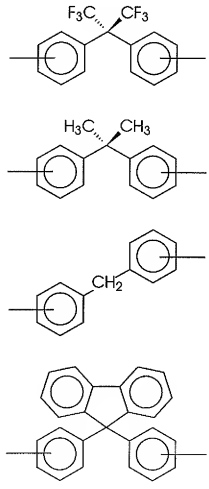
wherein a is an integer of from 1 to 5 and R' is a hydrogen atom, an alkyl group, an aryl group, an arylalkyl group, an alkylaryl group, or a mixture thereof, wherein two or more R' groups can be joined together to form a ring, and (vi) a carbonate base; and (B) heating the reaction mixture

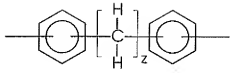
and removing generated water from the reaction mixture, thereby effecting a polymerization reaction.

42. (Currently Amended) A process according to claim 41 wherein each A, independently of the others, is

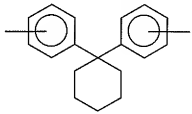


or a mixture thereof and each B, independently of the others, is





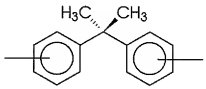
wherein z is an integer of from 2 to about 20,



or a mixture thereof.

43. (Original) A process according to claim 41 wherein A is

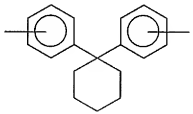
and B is



44. (Cancelled)

45. (Original) A process according to claim 41 wherein A is

and B is



46. (Cancelled)

47. (Original) A process according to claim 41 wherein Ar is a substituted aryl group or a substituted arylalkyl group.

48. (Original) A polymer according to claim 41 wherein Ar is an unsubstituted aryl group or an unsubstituted arylalkyl group.

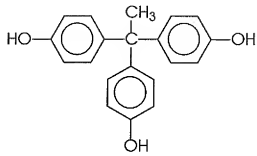
49. (Original) A polymer according to claim 41 wherein Ar is an aryl group having one or more hetero atoms therein or an arylalkyl group having one or more hetero atoms therein.

50. (Original) A polymer according to claim 49 wherein the one or more hetero atoms is oxygen, nitrogen, sulfur, silicon, phosphorus, or a mixture thereof.

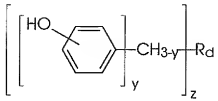
51. (Original) A polymer according to claim 41 wherein Ar is an aryl group having no hetero atoms therein or an arylalkyl group having no hetero atoms therein.

52. (Original) A process according to claim 41 wherein x is 3.

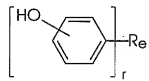
53. (Original) A process according to claim 41 wherein the polyfunctional phenol is



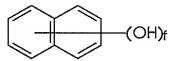
54. (Original) A process according to claim 41 wherein the polyfunctional phenol is (a) of the formula



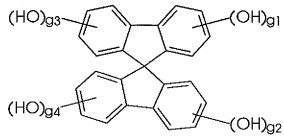
wherein y is an integer of 1, 2, or 3, z is an integer representing the number of HO-ϕ-CH_{3-y}- groups on R_d, and R_d is a monovalent moiety; (b) of the formula



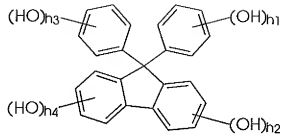
wherein r is an integer of at least about 3 and R_e is an alkyl group, an aryl group, an arylalkyl group, or an alkylaryl group, (c) of the formula



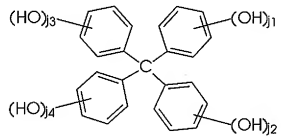
wherein f is an integer of at least 3, (d) of the formula



wherein g_1, g_2, g_3, and g_4 are each integers of 0, 1, 2, 3, or 4, provided that the sum of $g_1+g_2+g_3+g_4 \geq 3$, (e) of the formula



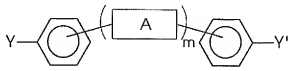
wherein h_1, h_2, h_3, and h_4 are each integers of 0, 1, 2, 3, or 4, provided that the sum of $h_1+h_2+h_3+h_4 \geq 3$, (f) of the formula



wherein j_1, j_2, j_3, and j_4 are each integers of 0, 1, 2, 3, or 4, provided that the sum of $j_1+j_2+j_3+j_4 \geq 3$, or (g) mixtures thereof.

55. (Original) A process according to claim 41 wherein the polyfunctional phenol is 1,1,3-tris(2-methyl-4-hydroxy-5-tert-butylphenyl)butane, 3,3,3',3'-tetramethyl-1,1'-spirobisindane-5,5',6,6'-tetrol, pyrogallol, 1,2,4-benzenetriol, phloroglucinol dihydrate, dithranol, nordihydroguaiaretic acid, C-methylcalix(4)resorcinarene, C-undecylcalix(4)-resorcinarene monohydrate, catechin hydrate, epicatechin, or mixtures thereof.

56. (Previously Presented) A process according to claim 41 wherein the compound of the formula



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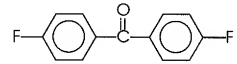

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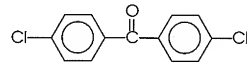

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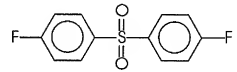

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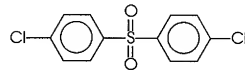
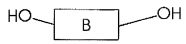


,

or mixtures thereof.

57. (Original) A process according to claim 41 wherein the compound of the formula



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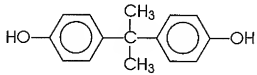

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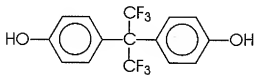

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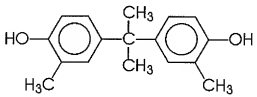

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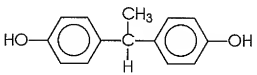

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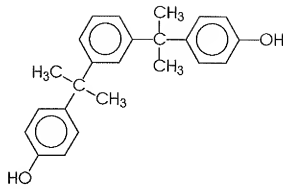
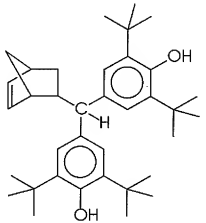
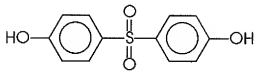
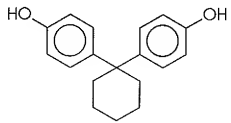








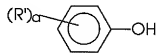
or mixtures thereof.

58. (Original) A process according to claim 41 wherein a solvent is present.

59. (Original) A process according to claim 58 wherein the solvent is N,N-dimethylacetamide, sulfolane, dimethyl formamide, dimethyl sulfoxide, N-methyl pyrrolidinone, hexamethylphosphoric triamide, or mixtures thereof.

60. (Cancelled)

61. (Currently Amended) A process according to ~~claim 60~~ claim 41 wherein



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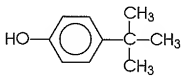


62. (Currently Amended) A process according to ~~claim 60~~ claim 41 wherein

is a methyl phenol, an ethyl phenol, a propyl phenol, a butyl phenol, a pentyl phenol, a hexyl phenol, a heptyl phenol, an octyl phenol, a nonyl phenol, a decyl phenol, an undecyl phenol, a dodecyl phenol, a phenyl phenol, a tolyl phenol, a benzyl phenol, a methoxy phenol, an ethoxy phenol, a propoxy phenol, a butoxy phenol, a pentyloxy phenol, a hexyloxy phenol, a heptyloxy phenol, an octyloxy phenol, a nonyloxy phenol, a decyloxy phenol, an undecyloxy phenol, a dodecyloxy phenol, a phenoxy phenol, a tolyloxy phenol, a benzyloxy phenol, a (polyethyleneoxy) phenol, a (polypropyleneoxy) phenol, a (polybutyleneoxy) phenol, a naphthol, or a mixture thereof.

63. (Original) A process according to claim 41 wherein the carbonate base is lithium carbonate, sodium carbonate, potassium carbonate, cesium carbonate, or a mixture thereof.

64. (Original) A process according to claim 41 wherein the carbonate base is potassium carbonate.

65. (Original) A process according to claim 41 wherein the carbonate base is cesium carbonate.

66. (Original) A process according to claim 41 wherein a solvent is present and wherein the reaction mixture is heated to reflux temperature.

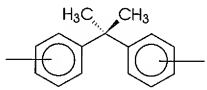
67. (Original) A process according to claim 41 wherein water is removed from the reaction mixture by azeotropic distillation.

68. (Original) A process according to claim 67 wherein the azeotropic distillation is carried out with toluene.

69-80. (Cancelled)

81. (New) A process according to claim 41 wherein A is

and B is



82. (New) A process according to claim 41 wherein A is

and B is